# Data Types Used in Vulnerability Mapping

Maps were developed to visually show where resources could be inundated by sea level rise. Each map contains data shown as one of three types: point, line, and polygon. Geographic data is almost always depicted in one of these forms.

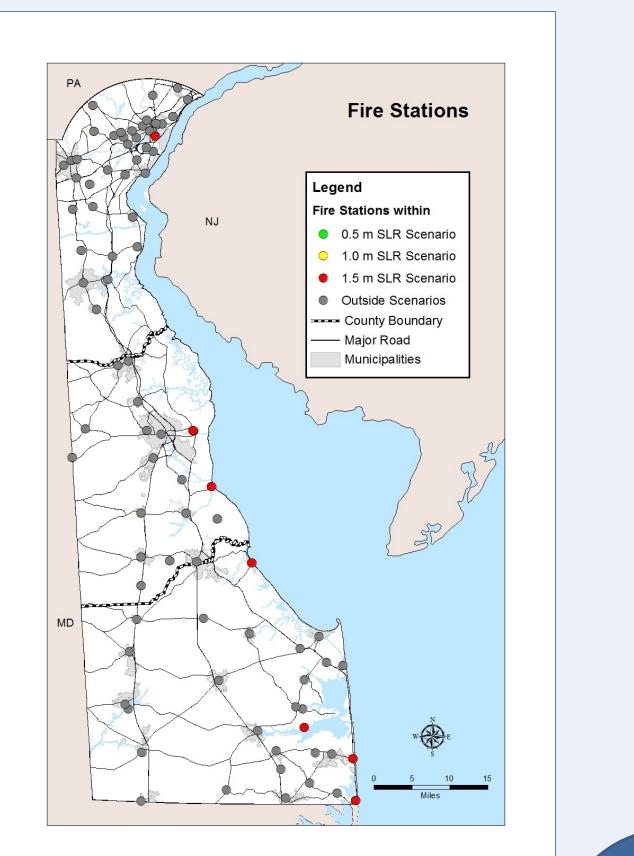
## **POINT**

A point is an object that has a specific location on a map.

**Examples: Historic Sites, Septic** 

**Systems, Fire Stations** 

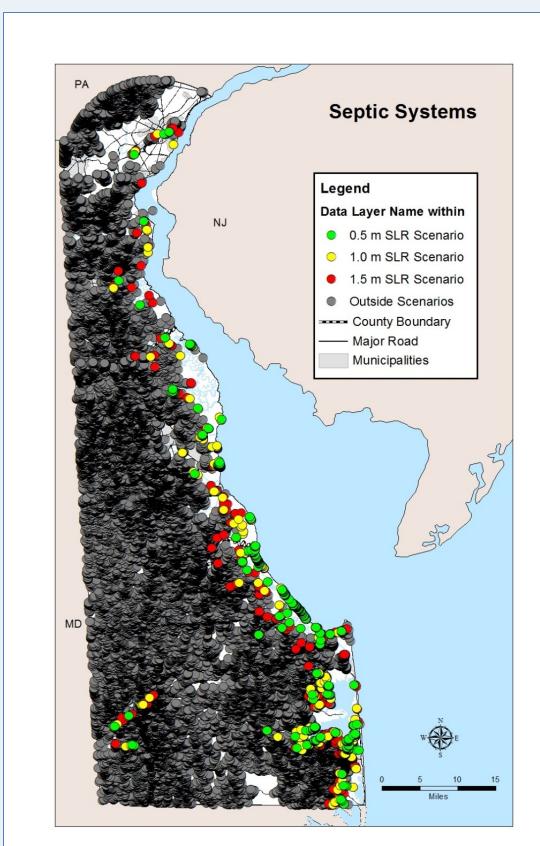
## 145 points



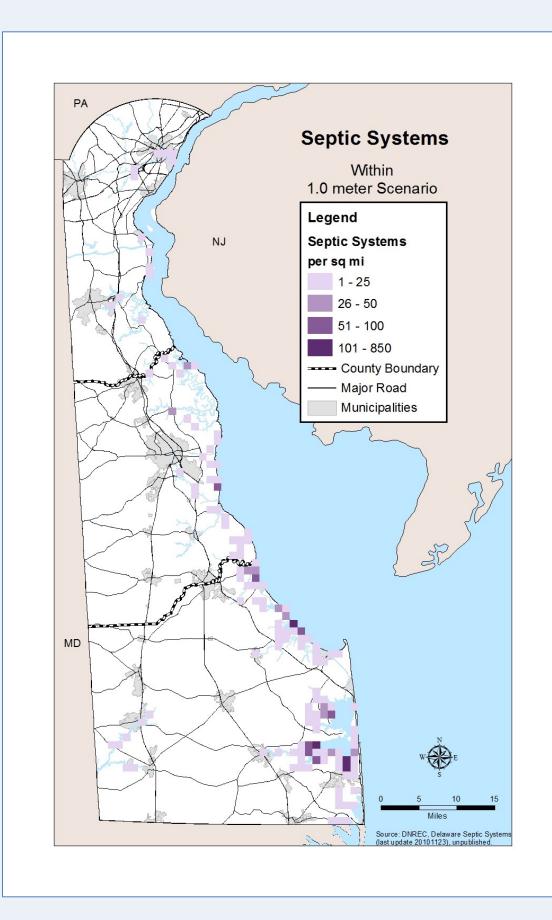
Can be easily viewed at the state level

A grid map, which counts points within a square mile, is a better way to visualize inundation impacts for resources at the state level with a large number of points.

## 78,109 points



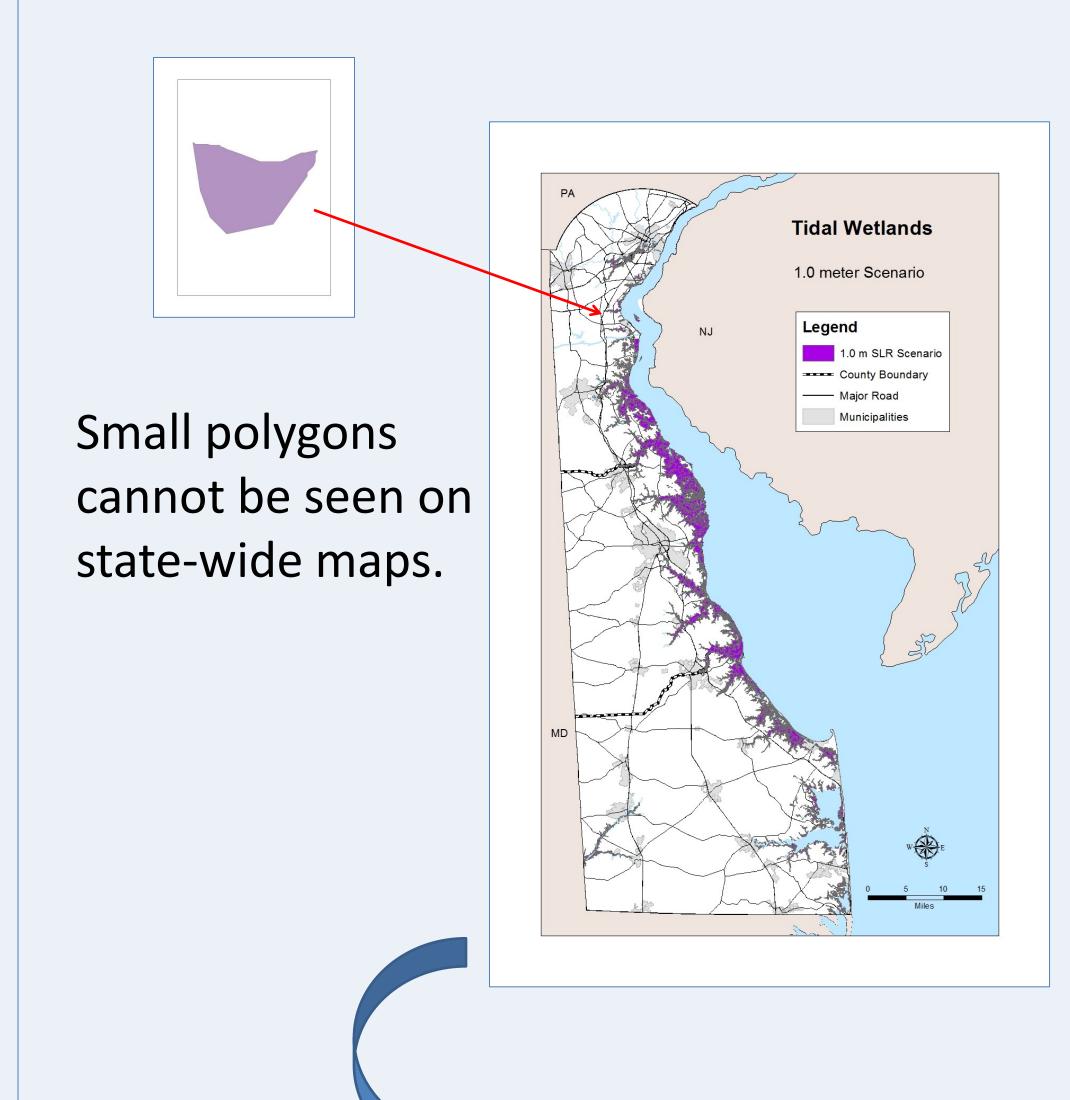
Cannot be easily viewed at the state level



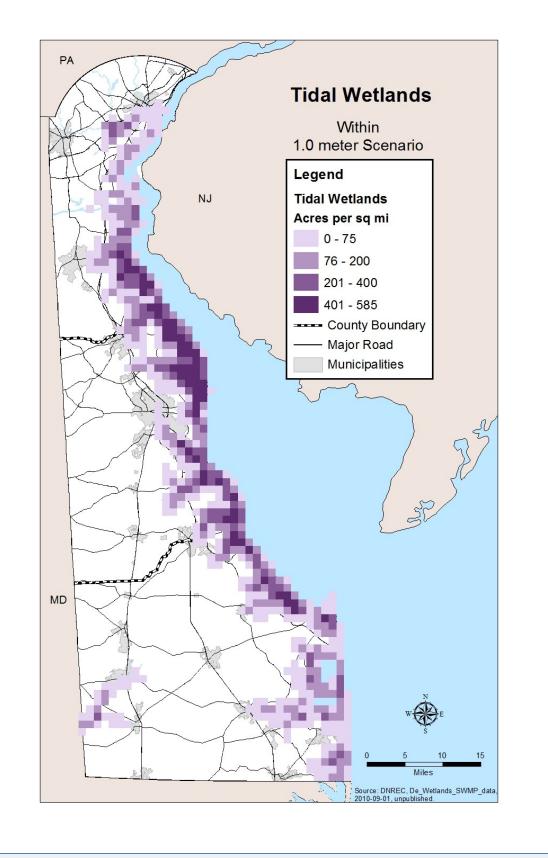
## **POLYGON**

A polygon is an enclosed feature with at least three sides.

**Examples: Wetlands and Parcels of Land.** 



A grid map allows small polygons to be summed, which makes impacts visible.

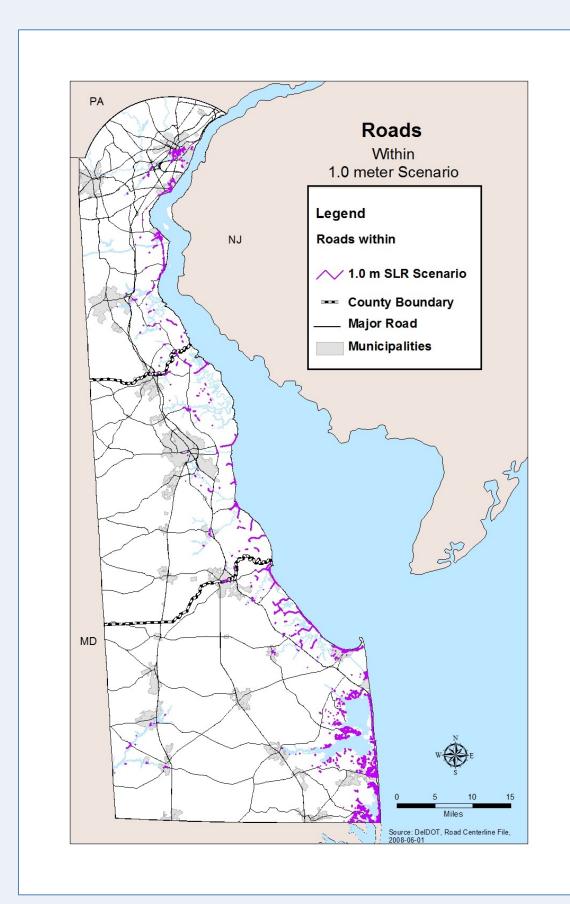


#### LINE

A line is a feature which only has length and no width. The feature has a beginning and an end.

Examples: Roads, Evacuation Routes, Railroads.

At the state level, small impacted line segments cannot be easily seen.



Impacts to line segments become more detailed and easier to see as the map area becomes more localized.

